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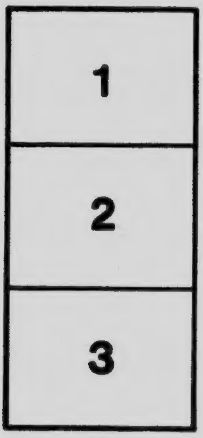

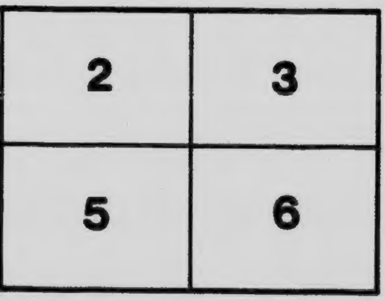

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Extension Service

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Manitoba Agricultural College

WINNIPEG, CANADA

Fodder Corn in Stook, Southern Manitoba

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Fodder Corn in Manitoba

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FIELD HUSBANDRY DEPARTMENT

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Fodder Corn in Manitoba

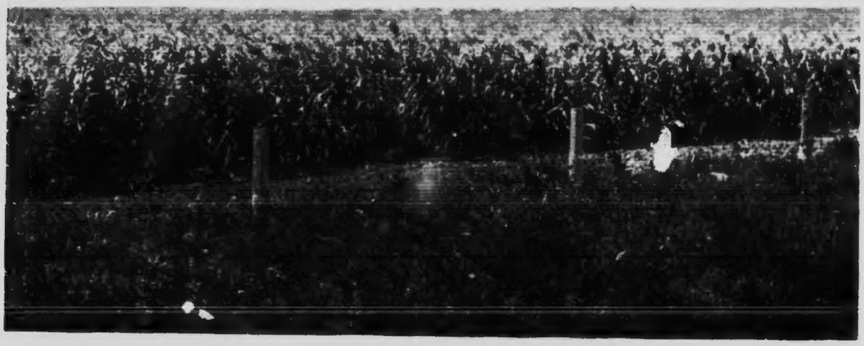
On many of the farms in the older localities of Manitoba there is a gradual change taking place in the system of cropping. More live stock is being kept, and consequently a larger acreage is sown to fodder crops. These plants not only furnish roughage for the farm stock, but at the same time they leave the soil in first-class condition for subsequent wheat crops. Among these forage plants, Indian Corn occupies a very important place. It gives a large yield (ten to twenty tons per acre) of succulent fodder. There are two methods of preserving the crop. The corn may be cut and stored in a silo or, if this is not feasible, the crop may be cured and fed from the stook. The fodder may be used as roughage for dairy cows, and it serves the same purpose for fattening steers and idle horses.

PLACE IN ROTATION

Indian Corn produces an extensive mass of roots in the surface soil, and it is prepared to make the best possible use of the available plant food. It will, therefore, give good results on land which contains a large amount of vegetable matter. It can thus be expected to grow well on sod land, or soil containing unrotted farmyard manure. Being a cultivated or hoed crop, it is used for cleaning the land of weeds, and the summer cultivation forms a mulch on the surface, conserving the moisture for the succeeding crop. Those who are growing corn maintain they get better results from wheat on corn stubble than on summer fallow.

SOIL PREPARATION

Where corn is sown on sod land, the field should be "broken" and "back-set" the previous year, and worked down firm and level with the



Stand of Fodder Corn in Red River Valley

Cutting Field of North-Western Dent Corn on the Manitoba Agricultural College Farm

METHODS OF PLANTING

No new machinery need be purchased for planting corn; the ordinary grain drill is well suited for this purpose. Some of the spouts may be closed up, allowing one to run every thirty-six or forty-two inches apart. This can be done by nailing a shingle or paper over the unused holes in the bottom of the hopper. Where it is desirable to plant the corn in hills, so that it may be cultivated each way, a corn planter may be utilized. If the area is small, however, it would be more economical to use the small hand planter after marking the ground off into squares with a marker drawn by a horse. This method is not so slow as it would seem to be. For fodder purposes the drilling is more suitable, because the stems do not grow so coarse, and a somewhat larger yield per acre is produced.

EARLY CULTIVATION WITH HARROW

After the corn is sown it should be harrowed every week with a light drag harrow. This will kill the weeds much more effectively than if a cultivator was used. Furthermore, the weeds are destroyed while they are exceedingly small, and the drill row is kept clean, thereby reducing he amount of hand labor. The harrowing may be continued until the orn is six or seven inches high. Little will be pulled out, or broken off, f the precaution is taken to harrow in the afternoon of a bright warm ay, because at this time the corn is more or less wilted and will bend eadily.

SUMMER CULTIVATION

After the corn is too high for the harrow it should be intertilled. If a nall acreage is grown this can be done readily with the potato scuffler, care being taken not to run it deeper than two inches, as the ro[illegible] the corn are close to the surface and will be cut off, thus reducing t[illegible] space of the plant. Where a larger acreage is sown the two-horse cultivator will be found more satisfactory as it is larger and more easily operated. The cultivation should continue until the weeds are all killed and the corn is high enough to shade the ground.

HARVESTING

The corn should be allowed to form ears before being cut, but care must be taken to have it harvested before it is frozen, as frozen corn is almost useless for fodder. Where a small amount is being grown it may be harvested with an ordinary grain binder. There is always difficulty in getting the reel high enough to throw the corn back on the table; but this may be overcome to some extent by removing every other bar on the reel. The grain binder, however, is not a really satisfactory implement for the purpose and where a number of adjacent farmers are each growing a small area it would be a good plan to purchase a corn harvester jointly, or else arrange to pay one man to cut all the corn. With the larger fields it will be found profitable to purchase a corn harvester as the wear and tear on the grain binder is considerable.

STOOKING AND STORING

Where the corn is not going to be put in a silo, stooking is a very important operation, as it is often left in the field until fed. It contains s[illegible] a large amount of moisture that if put in a stack or mow it will heat and spoil. Each stook should contain at least twenty sheaves. When the stook is completed it should be bound at the top with binder twine. This can be done more easily if a stooking-jack is used. The method of leaving the stooks out in the field during the winter has, however, serious disadvantages in that the drifting snow makes it difficult to lift the stooks when required. In order to overcome this the corn may be hauled in when cured, and stored by standing the sheaves up along each side of a pole placed horizontally at a suitable distance from the ground. Stacking by placing a layer of sheaves between layers of about two feet of straw has also proven quite satisfactory.

THE SILO

It is safe to state that the silo in Manitoba has passed the experimental stage. The value of silage in the production of milk and beef has been amply demonstrated on the Manitoba Agricultural College Farm. Leading dairy and live stock farmers also recommend this method of handling the corn crop. The building of the silo will depend largely on the amount of capital the farmer has at his disposal. If he has the ready money he will disc and drag harrow in the fall and spring. If stubble land is used, it should be plowed, packed and harrowed in the fall, and harrowed from time to time in the spring, to keep a perfect mulch and to kill the weeds. The seed bed must be firm with a fine granular earth mulch on the surface.

MANURING

There is no crop that will make better use of farm-yard manure than fodder corn. A large growth of stem and leaf is required. The application of manure invariably gives an increased yield. Where possible the manure should be spread in the fall and plowed in. If this is not practicable, well rotted manure may be spread in the spring, and worked in with a disc harrow. If unplowed stubble land is to be used for the crop, the manure may be spread during the winter and the land plowed shortly before planting time. The manure will catch the snow and thus give the corn the benefit of additional moisture. Since the crop is planted relatively late, the holding of the snow will not delay planting while the manure will act as a mulch and thus prevent surface evaporation.

VARIETIES

Varieties which ripen in Western Ontario, or in the border States south of Manitoba. are suitable for the production of fodder in the Canadian West. In the Red River Valley "Longfellow" and "North Western Dent" have given good results. Both are high yielders, and are sufficiently early for the southern and eastern portions of the Province. "North Dakota Flint," "Gehu" and "Free Press" are somewhat earlier still and will give good results in situations too far north for the "Longfellow" or "North Western Dent."

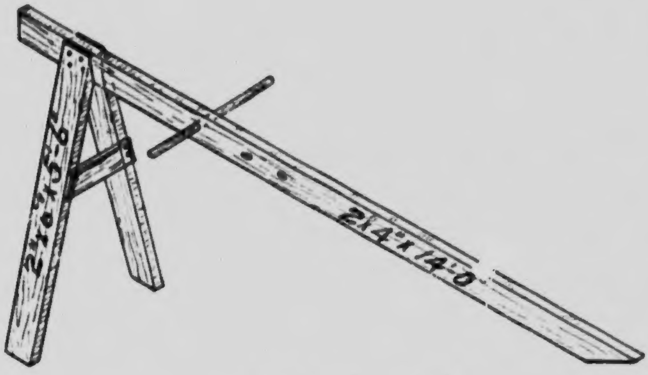
TIME OF PLANTING

The time of planting is a very important factor in the successful production of fodder corn. It should not be sown before the soil has become thoroughly warmed; this will be about the 24th May in the average season. It should not be sown later than the 15th June; so that it may become sufficiently matured before being injured by fall frosts.

QUANTITY OF SEED PER ACRE

When sown in drills about half a bushel of seed per acre will be sufficient. This will place the seeds four or five inches apart in the row, with the drills thirty-six inches apart. If the seed is put in hills, a smaller quantity will be required. If corn is being used as a substitute for fallow with a desire to cover as much land as possible, the seed may be planted in rows or hills forty-two inches apart.

find this addition to his equipment a profitable investment, as there is no doubt that ensiling is the best method of preserving the corn, and of getting the best results from the fodder. If the corn is not matured before cutting, the sheaves should be left on the ground to dry a day or two before putting in the silo. A cutting box is a necessary piece of machinery in filling, since the stalks must be cut into pieces about one-half inch in length. It will then pack in closer and keep much better. This packing or tramping is important, especially around the walls. After the silo has been filled it should be allowed to settle for a few days and filled up again. When it stops settling it will keep better if the surface is level, or just slightly higher in the centre. It will then require no further attention until it is ready for feeding.



Stooking Jack